

Application No. 10/675,219
Amendment dated October 24, 2005
Reply to final Office Action of July 22, 2005

Remarks

The Examiner has rejected claim 60 under 35 U.S.C. §102(b) as anticipated by Hine U.S. Patent No. 6,357,867 or Lin U.S. Patent No. 5,764,263, and has rejected claims 48-50, 65, 67 and 84-89 under 35 U.S.C. §103(a) as unpatentable over Hine et al. in view of Uchida et al. U.S. Patent No. 5,225,852 and Yanaka et al. U.S. Patent No. 6,149,257. The Examiner has rejected further rejected claims 48-50, 65 and 84-89 as unpatentable over Yanaka et al. in view of Uchida et al.

Applicant has simplified the claims with amendments focusing on the feature of supporting the web out of contact with an underlying surface. This protects the web from liquid ink that passes through the a porous web by maintaining a space between the web and the underlying surface. None of the references discloses this feature.

Applicant claims a method of ink jet printing onto a web having pores or other openings therethrough that will allow some of the ink that is jetted from a printhead toward the web to pass through the openings. If the web is lying in contact with a support table, ink can collect on the table and be smeared by the web, contaminating the backside of the web. Applicant stretches the web at a printing station by applying tension to the web, and thereby maintains a space between the web and the surface of the table. As a result, liquid ink that passes through the web and onto the surface of the table does not contact the back of the web. The apparatus that is claimed recites the means for supporting a web over the surface so that the web is out of contact with the surface at the printing station with a space between the web and the surface. With this apparatus, when ink is jetted from the printhead onto the web, liquid ink that passes through the web and onto the surface of the underlying table is kept from contact with the web. In particular embodiments, tension rollers are used for stretching the web through a printing station such that a space is maintained between the web and the surface at the printing station. With particular embodiments, UV curable ink is jetted and a UV curing lamp exposes the jetted ink on the web. In further embodiments, the UV curing lamp exposes at least some of the ink that was jetted through the web and onto the underlying surface to UV energy to at least partially cure UV ink jetted onto the surface. When ink on the underlying surface is so cured, liquid ink will not

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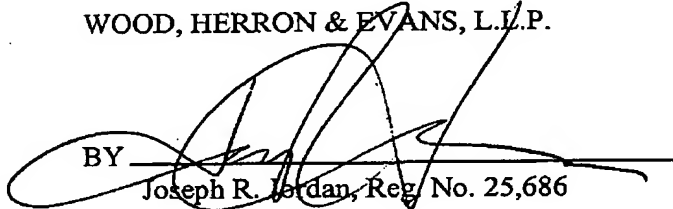
contaminate the substrate even if it contacts it. A non-stick protective coating may be provided on this underlying surface. The cited art does not suggest this combination.

For the reasons stated above, it is submitted that the pending claims are allowable. An early allowance is respectfully requested.

Applicant does not believe that any fees are due in connection with this submission. However, if such extension is due or any other fees are necessary, the Commissioner may consider this to be a request for such and charge any necessary fees to deposit account 23-3000.

Respectfully submitted,

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